

Abstract

A method can change transmit schedules in an ultra-wideband radio network by collecting traffic flow information from the nodes in the network, calculating new schedules that can be based on the traffic flow information and that can maintain traffic collisions on the network below predetermined levels, disseminating the new schedules to the network nodes and synchronizing a switch to the new schedules. The calculations for the new schedules can employ “hard” problem solution techniques, such as simulated annealing, genetic algorithms, complete searches and heuristics.